

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Group Art Unit No.: 2446

Rajiv Goel, et al.

Examiner: Benjamin R. Bruckart

Serial No.: 10/824,725

Confirmation No.: 6713

Filed on: April 14, 2004

For: DYNAMIC CHAIN CREATION AND  
SEGMENTATION OF THE PACKET-  
FORWARDING PLANE

**VIA EFS**

Commissioner for Patents  
Alexandria, Virginia 22313-1450

**REPLY BRIEF**

Sir:

This Reply Brief is submitted in response to the Examiner's Answer mailed August 20, 2009, and may be timely filed on or before October 20, 2009.

**I. THE EXAMINER'S ANSWER FAILS TO ESTABLISH THAT *CONTA* AND  
*SINGH* DISCLOSE THE CLAIMED INVENTION**

**A. The Claimed Chain Creation Steps are Not Inherent in *Conta***

Appellant's opening brief establishes that *Conta* and *Singh* together fail to describe either explicitly or inherently the claimed steps of "determining whether a new decapsulation chain should be created comprises: determining whether at least one physical port of a particular card of the network element is configured to receive data packets of a type that would be processed by a decapsulation chain for the particular virtual interface." The Examiner's Answer contends, at page 8, that the claimed "steps of creating an encapsulation chain and a decapsulation chain are inherently taught by the *Conta* reference because the reference teaches that these engines are required to process the transmitting (sending) and receiving (decapsulation) of packets across the

tunnel” (citing *Conta* paragraphs 51, 60-63. The Examiner’s Answer is clearly erroneous and unsupported by the cited paragraphs.

None of the cited paragraphs discloses the claimed features of Claim 25. *Conta* describes a system in which the encapsulation engine and the decapsulation engine are presumed to exist. Consequently, *Conta* neither discloses nor in any way suggests “determining whether a new decapsulation chain should be created comprises: determining whether at least one physical port of a particular card of the network element is configured to receive data packets of a type that would be processed by a decapsulation chain for the particular virtual interface.”

Further, the Examiner’s underlying rationale is incorrect. The Examiner essentially argues that since *Conta* describes an encapsulation engine and decapsulation engine, these engines must have been created at some point, and consequently *Conta* inherently discloses “determining whether a new decapsulation chain should be created comprises: determining whether at least one physical port of a particular card of the network element is configured to receive data packets of a type that would be processed by a decapsulation chain for the particular virtual interface.” However, Claim 25 does not generally claim existence of encapsulation and decapsulation engines. Instead, Claim 25 explicitly recites determining whether a new decapsulation chain or a new encapsulation chain **should be created**. For example, Claim 25 features “determining whether at least one physical port of a particular card of the network element is configured to receive data packets of a type that would be processed by a decapsulation chain for the particular virtual interface.” Indeed, one of the two practical consequences of the determinations made in Claim 25 is that an encapsulation chain or a decapsulation chain **might not** be created. The determination step of Claim 25 is completely missing from *Conta* and is not inherent in the engines of *Conta*.

**B. The Examiner's Answer Mischaracterizes the Record About *Singh***

Page 8, lines 14 - 17 of the Examiner's Answer argue for the first time that "[t]he creation being based on at least one physical port of a particular card is taught by the second reference, *Singh* (this is not argued [by Appellant])." Respectfully, this is also a mischaracterization of the record; the issue has not been argued before because the Examiner never previously raised it. In past communications, the Examiner has only cited *Singh* for allegedly disclosing "the architecture of the network element that it would comprise a card comprising the physical ports," but has never previously asserted that *Singh* shows "[t]he creation being **based on** at least one physical port of a particular card" (emphasis added). *See, e.g.*, Final Office Action, August 29, 2008, page 4, lines 6-10.

But even if *Singh* can be relied on to provide multiple cards with ports in a network element, *Conta* and *Singh* together still fail to describe either explicitly or inherently "determining whether a new encapsulation chain should be created comprises: determining whether at least one physical port of a particular card of the network element (a) is configured to send data packets of a type that would be produced by an encapsulation chain for the particular virtual interface and (b) can send data packets toward a destination associated with the particular virtual interface" as claimed. *See* Appeal Brief, page 12, lines 3-8.

**C. The Examiner's Answer Confuses Tunnels with Physical Ports**

At page 9, lines 3-6, the Examiner's Answer asserts that in *Conta* paragraph 7, "'by definition' the tunnel is created between two nodes. *Conta* para 81 shows that tunnel interfaces are of two types (transmit and receiving). Both interfaces need to be created to enable and facilitate the transmission of the packet across the tunnel." Respectfully, this assertion is incorrect.

The Examiner's Answer confuses tunnels with physical ports. A tunnel is a logical communication channel that comprises and connects two end points. A physical port in a network element is an electronic communication interface that exists independent of whether one or more tunnels have been created logically between the network element and any other network element. The Examiner's argument analogizing tunnels to physical ports is simply unreasonable and overbroad to a skilled person, and lacks factual support.

The Examiner's Answer's reliance on the tunnel is founded on several erroneous assumptions. As noted previously, *Conta* presumes the existence of the encapsulation engine and the decapsulation engine. The Examiner's Answer relies on this presumption as a basis for the other assertions previously noted. As a tunnel comes to existence when two endpoints communicate, when the tunnel is created by *Conta* to process packets between the two endpoints, *Conta*'s encapsulation engine and the decapsulation engine have already been in existence. There is simply no need to determine whether these engines should be created when the tunnel is created, as argued by the Examiner's Answer. In addition, since the packets are already flowing, there is simply no need for *Conta* to determine at that point whether a physical port is capable of sending or receiving a type of packets, as featured in Claim 25.

## II. CONCLUSION AND PRAYER FOR RELIEF

Based on the foregoing, it is again respectfully submitted that (1) the rejection of Claims 25-30, 34, 36-41, 45-52, and 56 under 35 U.S.C. § 103 (a) over *Conta* in view of *Singh* and (2) the rejection of Claims 31-33, 35, 42-44, and 53-55 under 35 U.S.C. § 103 (a) over *Conta* in view of *Singh*, further in view of *Tuniman*, lacks the requisite factual and legal bases. Appellants therefore respectfully request that the Honorable Board reverse the rejections of Claims 25-45 and 47-56.

Respectfully submitted,

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